PLANNING & PROGRAMMING DIVISION
PLANNING RESEARCH SECTION
TRAFFIC ANALYSIS UNIT

TAU 3063-A

T.H. 212

S.P. 6229-04, 8214-18, 6230-06

Maryland Avenue to Lake Elmo

Prepared: June, 1964

MINNESOTA HIGHWAY DEPARTMENT

U.S. DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

Highway

T. S. Thompson

June 16, 1964

Johan Nygaard

TH 212 SP 6229-04, 8214-18, 6230-06
Maryland Avenue to Lake Elmo

This report is transmitted in response to your April 14, 1964 request for the updating of the 1980 traffic figures contained in TAU 3063 to 1986. The project location is shown on the map on page 2.

Alternate 1, with a White Bear Avenue interchange, is shown on the map on page 3 and alternate 2, without a White Bear Avenue interchange is shown on the map on page 4.

For each segment numbered on the maps on pages 3 and 4, the following data are tabulated on the forms on pages 5 through 9.

a. Vehicle Type Distribution

b. Total ADT

c. Total Heavy Commercial ADT

The DHV has not been transmitted since AM and PM peak hour volumes have already been submitted in TAU 323.

Segment 34, having the highest 1986 ADT has a 1963 ADT of 7100 at the present parallel location.

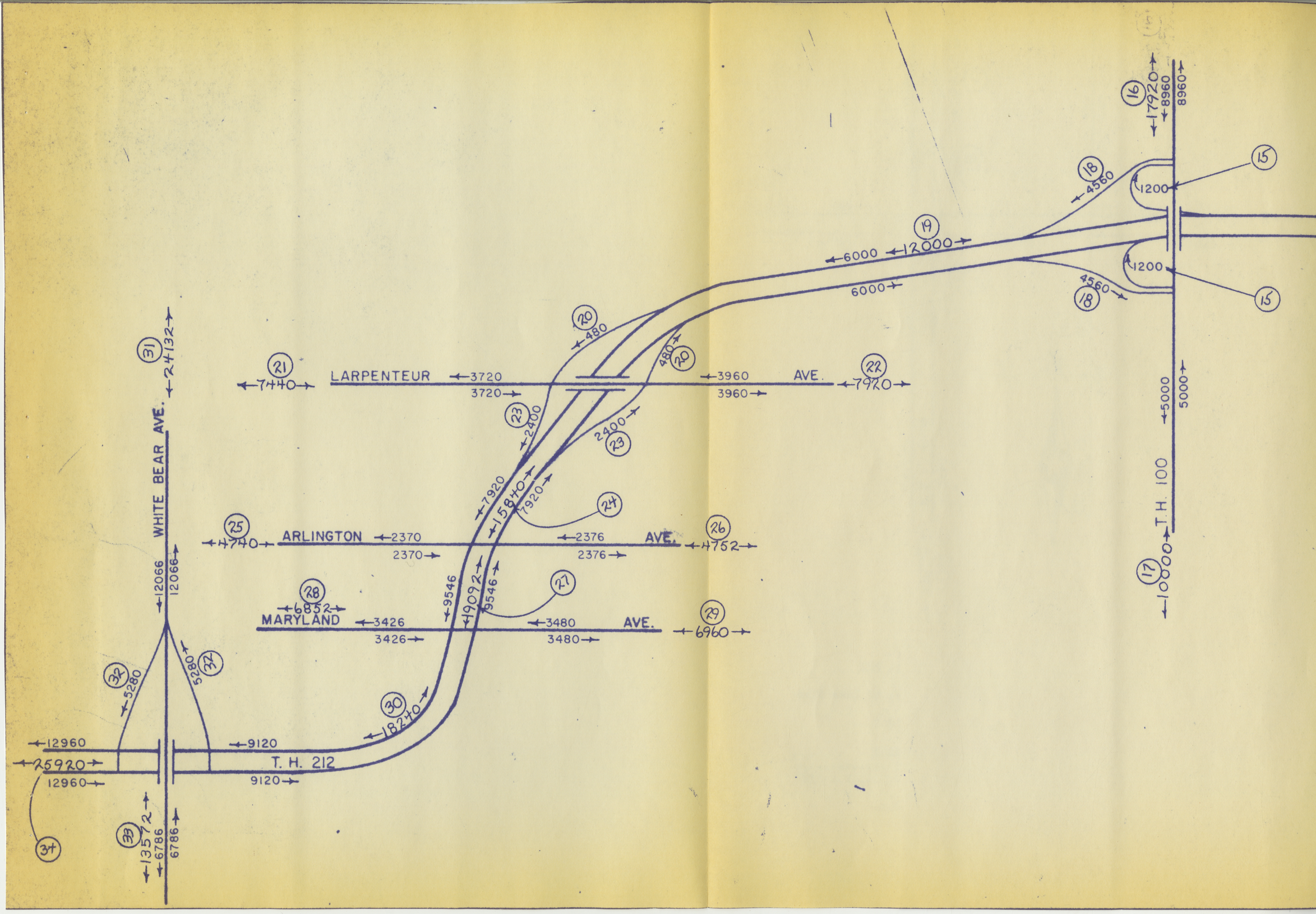
The Basic Data, Method and Assumptions are presented on page 10.

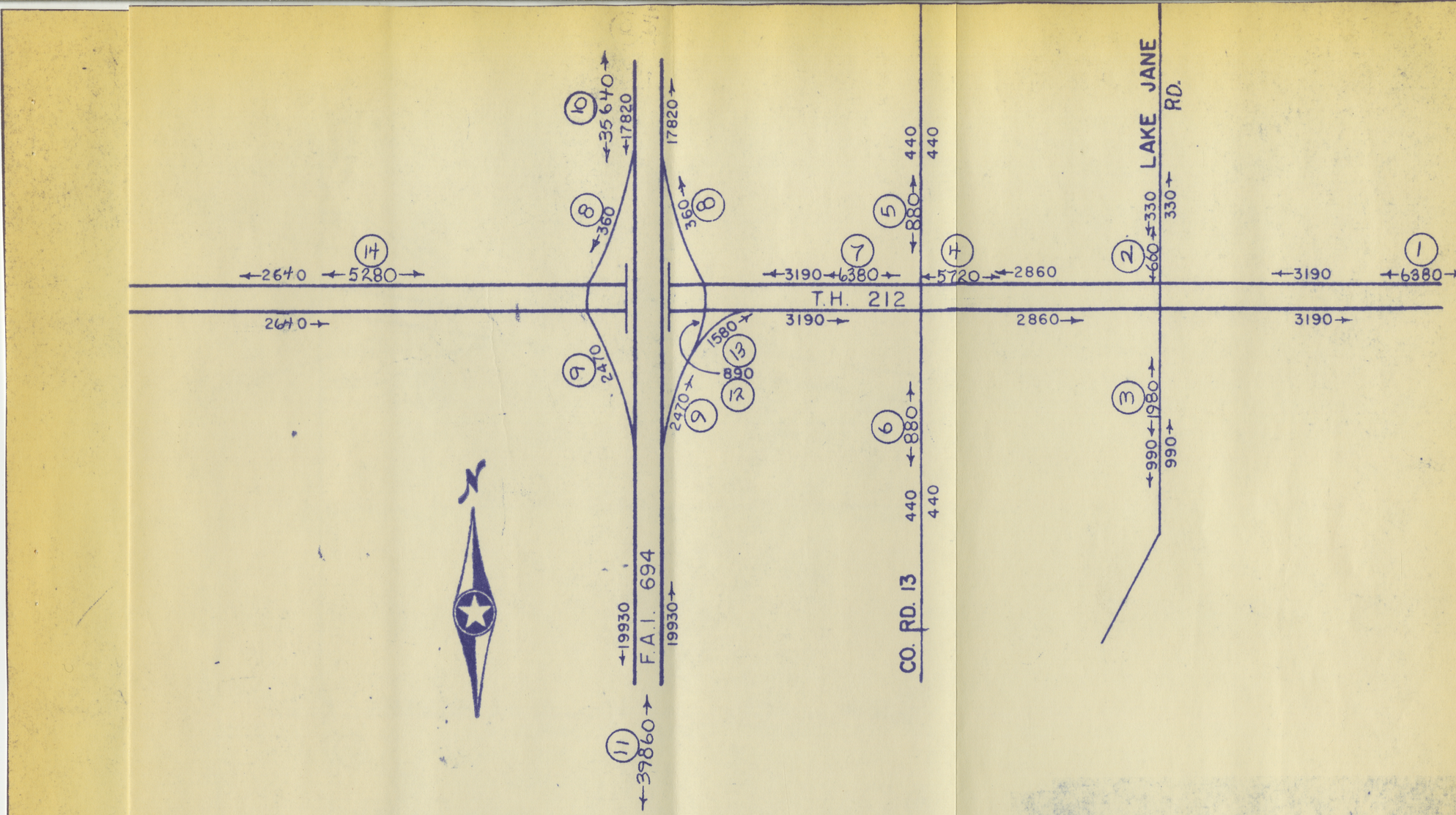
The request was initiated by B. L. Warzala for R. Henz, Designer.

JN:ss

STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS
WORK MAP

Base Map Prepared by the Planning And Programming Division Jan. 1, 1964


WHITE BEAR AVE.
LARPENTEUR
AVE.
ARLINGTON
AVE.
MARYLAND
AVE.
T. H. 212
T. H. 100
31
2412
21
7440
3720
3720
20
480
480
20
3960
3960
22
7920
16
17920
8960
8960
18
4560
15
1200
19
6000
12000
6000
1200
4560
18
15
5000
5000
23
2400
2400
23
7920
15840
7920
24
25
4740
2370
2370
2376
2376
26
4752
17
10800
28
6852
3426
3426
9546
19092
9546
27
3480
3480
29
6960
12066
12066
32
5280
5280
22
30
18240
12960
25920
12960
9120
9120
34
33
13572
6786
6786



T.H. 212

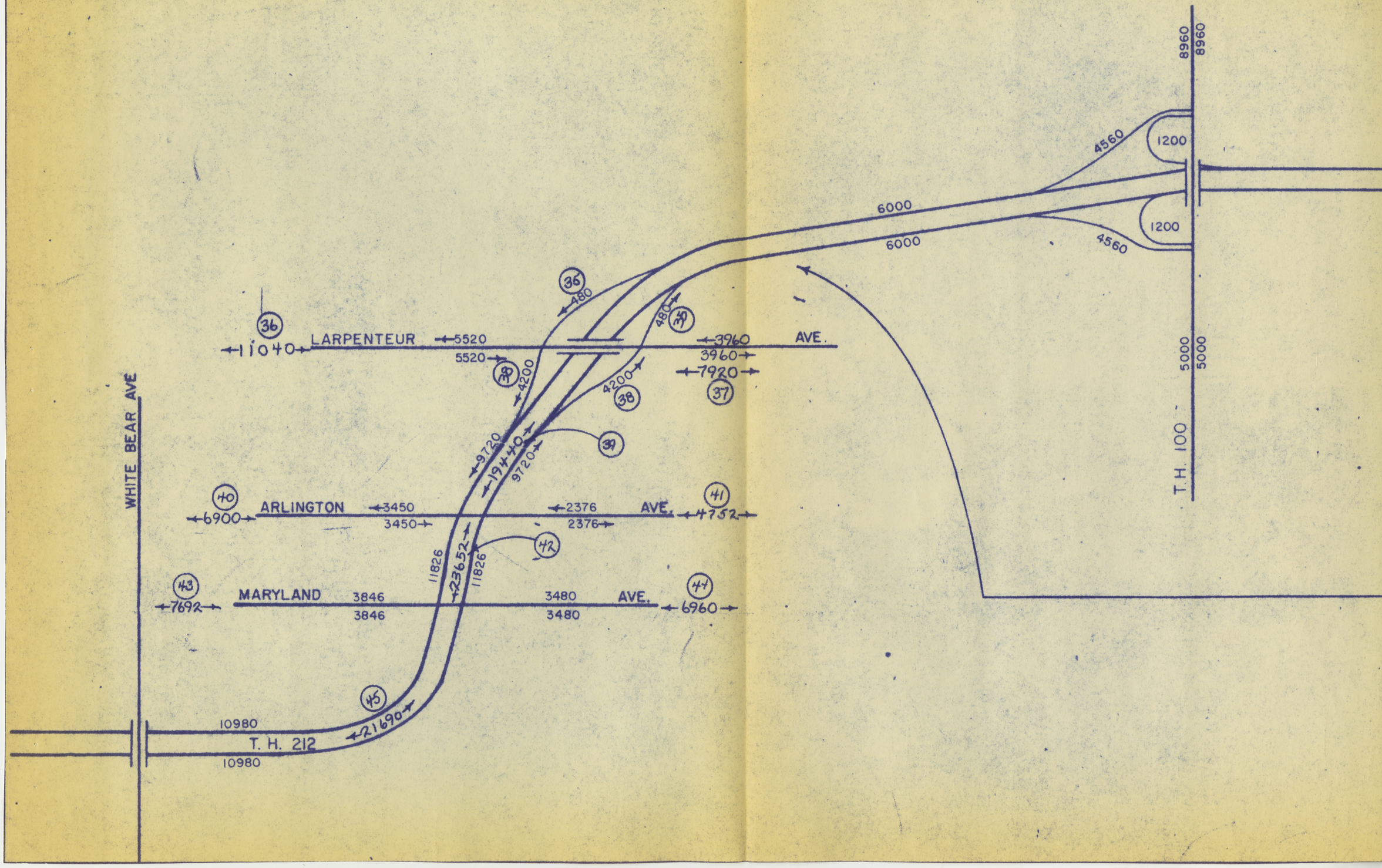
Maryland Avenue to Lake Elmo

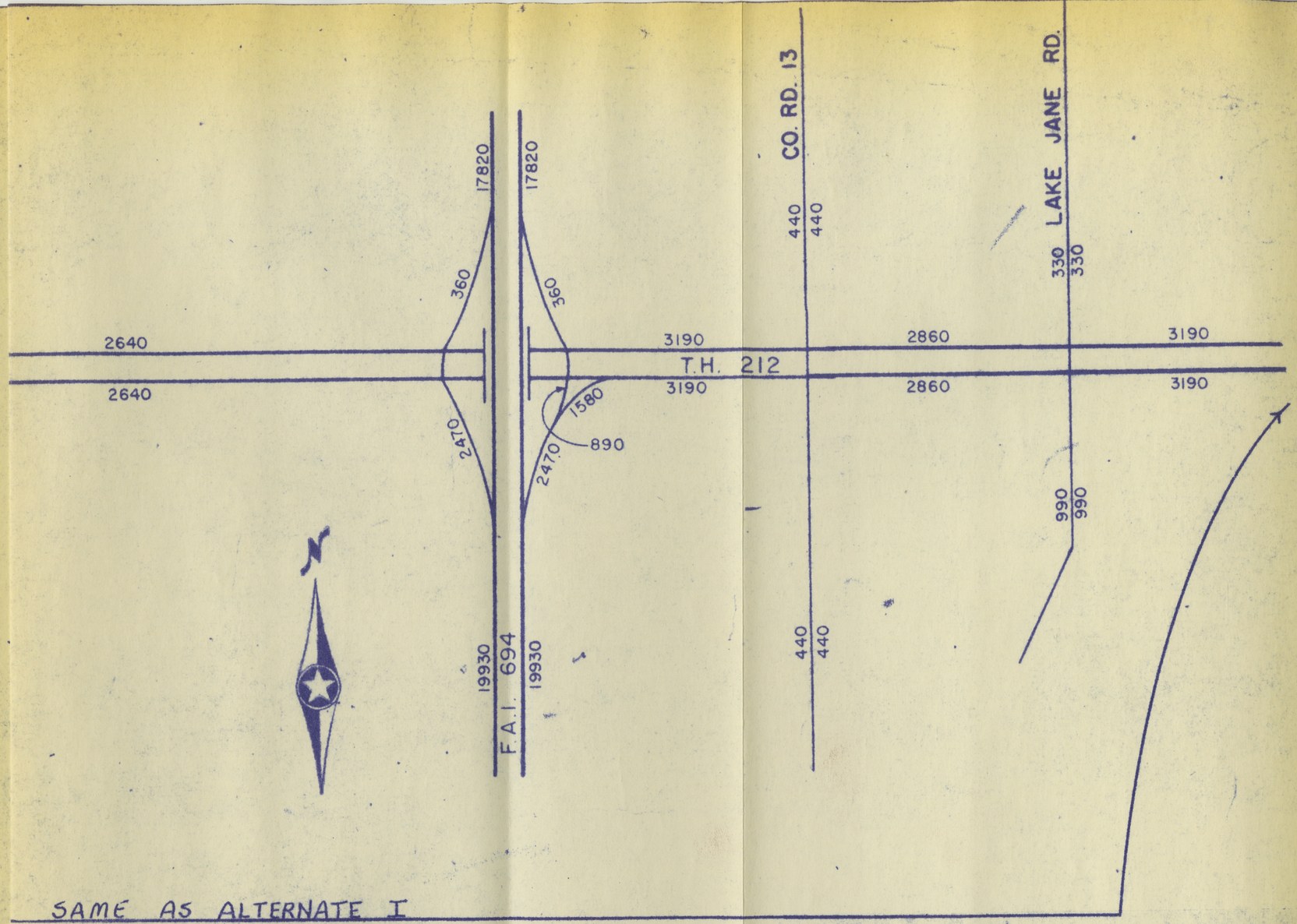
ALT I

Legend

Segment Number ..... (1)

1986 ADT 6380


WHITE BEAR AVE
T.H. 100
8960
8960
5000
5000
4560
1200
6000
6000
1200
4560
36
11040
LARPENTEUR
5520
5520
38
4200
480
36
480
35
3960
3960
7920
37
AVE.
4200
38
39
9720
19440
9720
40
6900
ARLINGTON
3450
3450
2376
2376
AVE.
41
4752
42
11826
23652
11826
43
7692
MARYLAND
3846
3846
3480
3480
AVE.
44
6960
45
10980
T. H. 212
21690
10980



SAME AS ALTERNATE I

T.H. 212

Maryland Avenue to Lake Elmo

ALT II

Legend

Segment Number 45

1986 ADT 21960

Form 2985 (9-63)

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1986 PART 1 OF 5

FOR

T.H. 212 S.P. 6229-04, 8214-18, 6230-06 LENGTH _____ MILES

COUNTY Ramsey - Washington LOCATION Maryland Avenue to Lake Elmo

BASED ON

1986 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 1 THROUGH 11 AS

DEFINED ON ATTACHED INDEX MAP

VEHICLE * TYPE	SEGMENT NUMBER										
	1	2	3	4	5	6	7	8	9	10	11
0	5934	618	1860	5314	826	826	5932	333	2314	33262	37224
1	222	26	80	196	34	34	222	14	85	810	952
2	68	2	8	68	6	4	70	4	27	588	634
3	20	2	4	18	2	2	22	0	3	110	116
4	48	2	4	46	2	2	50	4	10	252	264
5	16	0	2	14	0	0	14	0	3	380	386
6	72	10	22	64	10	12	70	5	28	238	284
TOTAL ADT	6380	660	1980	5720	880	880	6380	360	2470	35640	39860
TOTAL H. COMM. ADT	446	42	120	406	54	54	448	27	156	2378	2636
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS
1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS
2 = SINGLE UNIT-3 AXLE TRUCKS
3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
6 = BUSES AND TRUCKS WITH TRAILERS

Form 2985 (9-63)

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1986 PART 2 OF 5

FOR

T.H. 212 S.P. 6229-04, 8214-18, 6230-06 LENGTH _____ MILES

COUNTY Ramsey - Washington LOCATION Maryland Avenue to Lake Elmo

BASED ON

1986 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 12 THROUGH 22 AS

DEFINED ON ATTACHED INDEX MAP

VEHICLE * TYPE	SEGMENT NUMBER										
	12	13	14	15	16	17	18	19	20	21	22
0	831	1483	4886	1122	16822	9388	4279	11200	450	7060	7568
1	32	53	188	44	524	238	165	430	19	264	252
2	10	17	60	14	202	118	50	132	2	24	20
3	1	2	20	0	16	10	3	26	1	10	6
4	4	6	50	6	14	8	5	48	1	4	2
5	1	2	12	0	22	20	1	14	1	4	2
6	11	17	64	14	320	218	57	150	6	74	70
TOTAL ADT	890	1580	5280	1200	17920	10000	4560	12000	480	7440	7920
TOTAL H. COMM. ADT	59	97	394	78	1098	612	281	800	30	380	352
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS
1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS
2 = SINGLE UNIT-3 AXLE TRUCKS
3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
6 = BUSES AND TRUCKS WITH TRAILERS

Form 2985 (9-63)

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1986 PART 3 OF 5

FOR

T.H. 212 S.P. 6229-04, 8214-18, 6230-06 LENGTH _____ MILES

COUNTY Ramsey - Washington LOCATION Maryland Avenue to Lake Elmo

BASED ON

1986 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 23 THROUGH 33 AS

DEFINED ON ATTACHED INDEX MAP

VEHICLE * TYPE	SEGMENT NUMBER										
	23	24	25	26	27	28	29	30	31	32	33
0	2276	14852	4528	4548	17956	6566	6722	17150	22372	4894	12584
1	85	562	144	142	662	188	160	630	1020	222	576
2	8	144	14	12	146	20	14	142	252	55	142
3	3	30	8	6	34	10	2	32	24	6	12
4	2	50	2	2	58	4	0	58	28	7	14
5	2	16	2	2	22	4	0	22	28	7	14
6	24	186	42	40	214	60	62	206	408	89	230
TOTAL ADT	2400	15840	4740	4752	19092	6852	6960	18240	24132	5280	13572
TOTAL H. COMM. ADT	124	988	212	204	1136	286	238	1090	1760	386	988
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS
1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS
2 = SINGLE UNIT-3 AXLE TRUCKS
3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
6 = BUSES AND TRUCKS WITH TRAILERS

Form 2985 (9-63)

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1986 PART 4 OF 5

FOR

T.H. 212 S.P. 6229-04, 8214-18, 6230-06 LENGTH _____ MILES

COUNTY Ramsey-Washington LOCATION Maryland Avenue to Lake Elmo

BASED ON

1986 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 34 THROUGH 44 AS

DEFINED ON ATTACHED INDEX MAP

VEHICLE * TYPE	SEGMENT NUMBER										
	34	35	36	37	38	39	40	41	42	43	44
0	24266	450	10402	7562	3948	18196	6618	4550	22194	7378	6722
1	954	19	416	254	160	712	192	142	862	206	160
2	224	2	60	20	26	180	20	12	188	22	14
3	40	1	12	4	5	34	8	4	36	10	2
4	68	1	8	4	3	52	2	2	60	4	0
5	32	1	8	4	3	18	2	2	24	4	0
6	336	6	134	72	55	248	58	40	288	68	62
TOTAL ADT	25920	480	11040	7920	4200	19440	6900	4752	23652	7692	6960
TOTAL H. COMM. ADT	1654	30	638	358	252	1244	282	202	1458	314	238
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS
1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS
2 = SINGLE UNIT-3 AXLE TRUCKS
3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
6 = BUSES AND TRUCKS WITH TRAILERS

Form 2985 (9-63)

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1986 PART 5 OF 5

FOR

T.H. 212 S.P. 6229-04, 8214-18, 6230-06 LENGTH _____ MILES

COUNTY Ramsey - Washington LOCATION Maryland Avenue to Lake Elmo

BASED ON

1986 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 45 THROUGH 45 AS

DEFINED ON ATTACHED INDEX MAP

VEHICLE * TYPE	SEGMENT NUMBER										
	45										
0	20576										
1	812										
2	180										
3	34										
4	60										
5	24										
6	274										
TOTAL ADT	21960										
TOTAL H. COMM. ADT	1384										
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS
1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS
2 = SINGLE UNIT-3 AXLE TRUCKS
3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
6 = BUSES AND TRUCKS WITH TRAILERS

Basic Data, Method and Assumptions

TAU 233, in June of 1963, showed 1980 ADT and TAU 3063, in July of 1963, showed the 1980 vehicle type distributions for TAU 233.

TAU 323, in May of 1964, updated TAU 233 to 1986 ADT and attached 3063-A, in June of 1964, shows the 1986 vehicle type distributions for TAU 323.

The geometrics are the same in all the foregoing TAU's but TAU 323 reflects re-evaluated TH 694 travel by the Metropolitan Analysis Unit and normal growth rates for all other routes in the project. Consequently, the vehicle type distributions in TAU's 3063 and 3063-A were independently estimated by studying the origins and destinations of commercial vehicles contacting the corridor of TH 694. The commercial vehicles were then routed by travel time advantage to the structures of TH 694, TH 100, and White Bear Avenue with TH 212. The results were checked and corrected by using recent vehicle classifications counts conducted just south of TH 212 on TH 100 and White Bear Avenue.

The vehicle type distribution for TH 212 was based on a vehicle classification count recorded in 1961 for TH 212 just west of TH 100. The classification count was projected to 1986 by using statewide trends for each vehicle type.

The vehicle type distributions for Maryland, Arlington and Larpenteur Avenues were based on correlations of the past eight years vehicle classification counts conducted in the study area.